

WHAT IS CLAIMED IS:

1. A toroidal type continuously variable transmission comprising a housing, input and output side discs disposed in coaxial with each other and rotatably relative to each other within said housing, a plurality of trunnions rocked around respective pairs of coaxial pivot shafts located at positions twisted with respect to center lines of said input and the output side discs, displacement shafts supported for the respective trunnions, and a plurality of power rollers rotatably supported on said displacement shafts and pinched between inner surfaces of said input and output side discs, and in which said opposed inner surfaces of said input and output side discs have, at section, arc concave surfaces, and peripheral surfaces of the power rollers have spherical convex surfaces which are contacted with said inner surfaces, and traction oil can be supplied to contact areas between said inner surfaces of said discs and said peripheral surfaces of said power rollers, wherein:
a supplying amount of the traction oil is increased as a power to be transmitted from said input side disc to said output side disc is increased.

2. A toroidal type continuously variable transmission comprising a housing, input and output side discs disposed in coaxial with each other and

rotatably relative to each other within said housing,
a plurality of trunnions rocked around respective
pairs of coaxial pivot shafts located at positions
twisted with respect to center lines of said input and
5 the output side discs, displacement shafts supported
for the respective trunnions, and a plurality of power
rollers rotatably supported on said displacement
shafts and pinched between inner surfaces of said
input and output side discs, and in which said opposed
10 inner surfaces of said input and output side discs
have, at section, arc concave surfaces, and peripheral
surfaces of the power rollers have spherical convex
surfaces which are contacted with said inner surfaces,
and traction oil can be supplied to contact areas
15 between said inner surfaces of said discs and said
peripheral surfaces of said power rollers, wherein:
nozzles for supplying the traction oil can be
rocked as said trunnions are rocked around said pivot
shafts so that the traction oil injected from said
20 nozzles can be sprayed to circumferential positions
same as portions of said inner surfaces of said discs
contacted with said peripheral surfaces of said power
rollers.

3. A toroidal continuously variable transmission comprising:

a housing,

input and output side discs coaxially disposed with each other and rotatably relative to each other within said housing,

a plurality of trunnions rockable around respective pairs of coaxial pivot shafts located at positions twisted with respect to center lines of said input and output side discs,

displacement shafts supported by the respective trunnions, and

a plurality of power rollers rotatably supported on said displacement shafts and pinched between inner surfaces of said input and output side discs,

wherein inner surfaces of said input and output side discs have in section, arcuate concave surfaces, and peripheral surfaces of the power rollers have spherical convex surfaces which are in contact with said inner surfaces, and traction oil is supplied to contact areas between said inner surfaces of said discs and peripheral surfaces of said power rollers, and

wherein nozzle holes are provided for supplying the traction oil, said nozzle holes being rocked as said trunnions are rocked around said pivot shafts so that the traction oil ejected from said nozzle holes is sprayed only onto said discs, at positions circumferentially spaced from positions at which said inner surfaces contact with said peripheral surfaces of said power rollers.

4. A toroidal continuously variable transmission comprising:

a housing;

input and output discs coaxially disposed with each other and rotatable relative to each other within the housing, and each having an inner surface;

a plurality of pivotable trunnions;

a plurality of nozzle holes arranged for pivotal movement with pivotal movement of the trunnions; and

a plurality of power rollers rotatably supported by the plurality of trunnions and disposed between the input and output discs, wherein contact areas are formed between the inner surfaces of the input and output discs and peripheral surfaces of the power rollers, and

wherein the nozzle holes are oriented to direct traction oil only to portions of the inner surfaces of the input and output discs circumferentially spaced from the contact areas.